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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|--------------------------|------------------|
| 10/694,348 | 10/28/2003 | Othman A. Hamed | 60892.000016 | 2563 |
| 21967 | 7590 | 09/27/2004 | | |
| HUNTON & WILLIAMS LLP INTELLECTUAL PROPERTY DEPARTMENT 1900 K STREET, N.W. SUITE 1200 WASHINGTON, DC 20006-1109 | | | EXAMINER ALVO, MARC S | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1731 | |

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|------------------------------|--|
| Office Action Summary | Application No. 10/694,348 | Applicant(s) HAMED ET AL. | |
| | Examiner Steve Alvo | Art Unit 1731 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 1-36 and 52-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>10-28-03</u> . | 6) <input type="checkbox"/> Other: _____ |

The restriction requirement of June 15, 2004 is repeated and made Final. The Groupings should have been as follows:

- I. Claims 1-19, 57 and 58.
- II. Claims 20-36 and 52-56.
- III. Claims 37-51

As set forth in the restriction requirement, the product can be made by other processes, e.g. cross-linked by heating rather than a cross-linking agent.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 37- 51 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over ADMITTED PRIOR ART (Specification “Description of Related Art” and pages 15, 16 and 24) or KOLTISKO et al (5,938,995).

The ADMITTED PRIOR ART or KOLTISKO et al teach forming a cross-linked fiber in the same way that Applicant forms the cross-linked fiber, e.g. KOLTISKO et al discloses using the same cross-linking agent as the preferred cross-linking agent of the instant process (glyoxylic

acid) and forming absorbent articles (diapers) from the fibers. The instant product would have the same properties as the absorbent articles of the ADMITTED PRIOR ART or KOLTISKO et al as they are formed in the same way. It is noted that the instant specification, page 10 states that absorbent articles preferably have a centrifuge retention capacity of less than 0.48. How do the centrifuge retention properties of the absorbent articles of the ADMITTED PRIOR ART or KOLTLISKO et al differ from that of the instant product? See the ADMITTED PRIOR ART, page 1 for an acquisition layer between the core and top sheet and the core between and top and bottom sheets. See ADMITTED PRIOR ART pages 15 and 16 for using known alkali treatments. See ADMITTED PRIOR ART page 24 for using known super-absorbent polymer with the fibers to store liquid. If necessary, it would have been obvious to adjust the amount of cross-linking agent to obtain the optimum properties.

Claims 37 and 38 are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over SEARS (6,620,293).

SEARS teach forming a cross-linked fiber in the same way that Applicant forms the cross-linked fiber, e.g. SEARS et al discloses treating mercerized (NaOH treated fibers) with a cross-linking agent and making absorbent articles, e.g. diapers (column 7, lines 20-22), from the fibers. See column 7, lines 1-8 for Gravimetric Absorption Testing system. The instant process can use "Porosanier-J-HP" pulp from Rayonier Performance Fibers Division and Buckeye's HPZ products, available from Buckeye Technologies, see the instant specification, page 16, lines 18-21. This is the same caustic treated pulp used by SEARS (column 4, lines 40-45). How do Applicant's centrifuge retention properties differ from the absorbent properties of SEARS? If

necessary, it would have been obvious to adjust the amount of cross-linking agent to obtain the optimum properties.

Claims 39-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over SEARS as applied to claim 39 above, and further in view of ADMITTED PRIOR ART (Specification "Description of Related Art" and page 24).

The ADMITTED PRIOR ART, page 1 teaches using an acquisition layer between the core and top sheet and the core between and top and bottom sheets. It would have been obvious to use the acquisition layer of SEARS between the top sheet and absorbent structure as such is taught by the ADMITTED PRIOR ART. ADMITTED PRIOR ART pages 15 and 16 for using known alkali treatments. See ADMITTED PRIOR ART page 24 for using known super-absorbent polymer with the fibers to store liquid. The ADMITTED PRIOR ART on page 24, lines 20-23, teaches that it is known to use a super-absorbent polymer (SAP) with the absorbent fibers to store liquid. It would have been obvious to use SAP with the absorbent fibers of SEARS to increase the absorption and storage of liquid.

Claims 37-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over ADMITTED PRIOR ART (Specification "Description of Related Art and paragraph bridging pages 10-11 and pages 15, 16 and 24) or KOLTISKO et al (5,938,995) or SEARS in view of WO97/04162 or SUN et al (5,858,021) or LEITHAM et al (2002/0096276) or US 2003/0070776.

WO97/04162 or SUN et al (5,858,021) or LEITHAM et al (2002/0096276) or US 2003/0070776 teaches increasing the absorbency of absorbent fibers used in absorbent articles by treating the fibers with alkali. It would have been obvious to the artisan to improve the absorbent properties of the fibers of the ADMITTED PRIOR ART or KOLTISKO et al using the alkali

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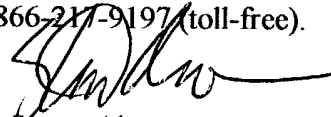
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treatment of WO97/04162 or SUN et al (5,858,021) or LEITHAM et al (2002/0096276) or US 2003/0070776.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 571-272-1185. The examiner can normally be reached on 5:45 AM - 2:15 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steve Alvo
Primary Examiner
Art Unit 1731

msa